Learning theories, teaching pedagogy, and technology series
The shift online: A cost-benefit analysis

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"...adapting to new structures requires considerable thought and planning—it's not simple to switch from text-dominated to multimedia content…"(Cann, 2015, p. 2*).*

I use the cost-benefit metaphor to discuss what is lost and gained from the shift to online learning. Drawing up a comprehensive balance sheet on such a topic is a vast undertaking and is outside the scope of this short article. So I will limit my analysis of classroom processes for the most part.

Image of a traditional in-person class (courtesy of pexels.com)

Why the question about loss and gain?

Loss and gain suggest that teachers, students, parents, and administrators, have not reached a final determination as to what serves learners best: online learning, synchronous or asynchronous, or in-person learning in the walled classroom. Face-to-face teaching is a centuries-old activity, and by sheer attachment to tradition, we remain nostalgic for it. On the other hand, few of us, yearning for tradition, would willingly roll the clock back to dial telephones, black and white TVs, or coal-powered steam trains. Though, truth be told, many of us would not say no to a sightseeing tour on a four-wheeled carriage.

Few of us, yearning for tradition, would willingly roll the clock back to dial telephones, black and white TVs, or coal-powered steam trains for example. Though, truth be told, many of us would not say no to a sightseeing tour on a four-wheeled carriage.

This means that change is inevitable and that we must come to terms with it. A new normal is continually settling in, and we should adapt to and espouse what is rolling on the learning baggage carousel out of our own free will. In ten years, or perhaps even less, there will be a generation for whom online learning is the only thing they will have known; they will likely raise an eyebrow at earlier learning delivery methods just as we now look at old, rusty filmstrips.

What is lost?

We mostly lament the loss of those intense social and emotional encounters in the physical classroom. Not that learners miss the old-school banking-style teaching where they sit for hours, taking notes from long-winded lectures delivered by the proverbial sage on the stage. However, there is no denying it just feels good to belong to a community of learners connected in real-time and in the same physical space. In such spaces, eye movement, facial expressions, body posture, and dress carry meanings often lost in virtual encounters. Here is how Quinn Barry of Stanford University put it":

> Students pay also for the chance to have fun, build lasting friendships and pursue extracurricular activities, relationships with professors and networking opportunities with fellow high-achieving students. From my experience at online high school, I know these aspects of college will be the most difficult to replicate remotely (WSJ 2020, np).

> In physical classrooms, everyone is audible, visible, tangible, and sharing the same air; this creates a strong sense of gratification and belongingness that is not easy to recreate in the online environment.

As a teacher, I find great joy in designing learning experiences where my students and I are seated in a circle mostly or some other arrangement. You see us focused on the same stuff, making eye contact, spontaneously reacting to each other's moves, expressing disapproval by a frown or joy through a smile, detecting something of a question mark in the eyes of the learner. We do this unhindered by any remote system where such instances are not easy to capture or detect. The sense of physical proximity affords this immediacy. In physical classrooms, everyone is audible, visible, tangible, and sharing the same air; this creates a strong sense of gratification and belongingness that is not easy to recreate in the online environment.

In such in-person environments, group synergy develops seamlessly, intergroup and intra member relationships develop organically, issues are easy to spot, and action is easy to take. In-person learning also engenders a sense of purpose that may be difficult to foster online. Members of this community purposefully travel from home or the library to class. It is akin to

belonging to a club whose members have a common purpose; they can be creative together, sing in unison, do role plays, correct each other, sometimes pick on each other, and whatnot.

What is gained?

The above may have given you the impression that online learning is all doom and gloom as the feeling of belongingness is watered down, if not downright absent. It isn't. Remember that online learning will be the default delivery system sooner than you think and is here to stay for good reasons.

> We are primarily an adapting species; we may yearn to traditional modes of action for a while, but our genome structure is programmed in such a manner that it adapts to and learns the new ropes.

Have you seen anyone wishing to rewind the clock to old film rolls or floppy disk drives? I don't think so. As the legendary Bob Dylan sang, 'The times, they are a-changin'' We are primarily an adapting species; we may yearn to traditional modes of action for a while, but our genome structure is programmed in such a manner that it adapts to and learns the new ropes. Otherwise, we are doomed to oblivion and run the unpleasant risk of becoming irrelevant. What are we migrating into when we espouse online? Come to think of it, our new teaching/learning environs are awash with accessories and affordances we can hardly do without as we speak. We need to decide which among today's teaching pedagogies and technological affordances best fits our learners' needs, and the rest is history.

I am not just speaking about the plethora of multimedia that we can import into our lessons by clicking a button; some learners like text, others prefer video, and some prefer listening. For others, an image or a graphic is all they need. Tapping into these resources is one thing and getting students to contribute creative artifacts of their own to our shared human repertoire is another. There is something inherently empowering when they turn their representations into a product or a digital object that someone somewhere will find extremely useful, if not today, then tomorrow.
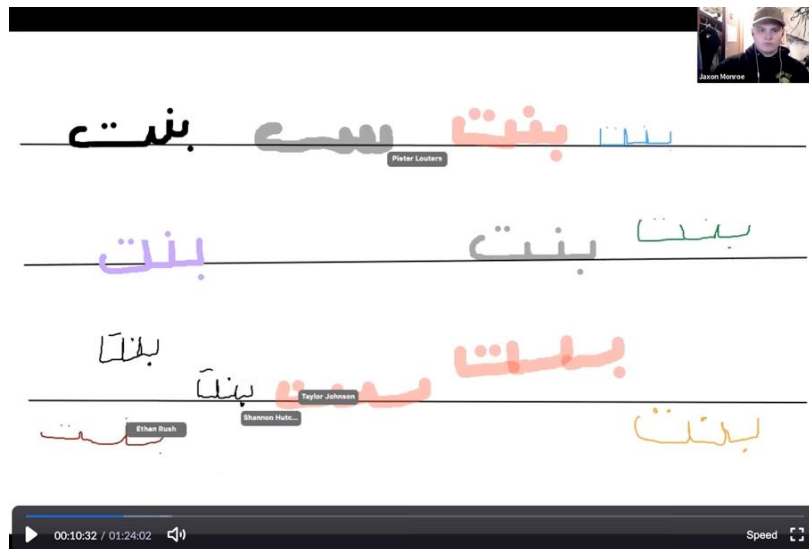
Image of online class where students are annotating on the Zoom whiteboard

Nor am I only speaking of the vast potential for networking via social media. Sources of knowledge are no longer to be sought only in the confines of the classroom, where teachers have a larger-than-life profile. Each member of this learning community has something to enrich the shared repository of thought, knowledge, skills, and aptitudes. The network, however, extends further beyond the videoconferencing room; eventually, anyone, anywhere, can chip in their input and enrich the community's perspectives. "Knowledge resides in the network" (Child and Shumate, 2007, p. 35). Being able to tap into the world as network is a cut above anything we have known since the advent of mass schooling back in the latter half of the 18th century.

> Zoom, Google Meet, Microsoft Teams, YouTube, TikTok, Facebook, wikis, blogs, and whatever else are constellations that have revolutionized the learning teaching landscape and fostered participation, collaboration, and creativity and boosted our learning potential to heights previously unimagined.

The Web 2.0 world, dubbed the read-write web, equalizes and democratizes learning opportunities through the rich toolkit it provides learners, teachers, and netizens. Web 2.0 allows users to "not only read the content but also write, modify and update the content online" Nath and Israwy, 2015, np). Zoom, Google Meet, Microsoft Teams, YouTube, TikTok, Facebook, wikis, blogs, and whatever else are constellations that have revolutionized the learning teaching landscape and fostered participation, collaboration, and creativity and boosted our learning potential to heights previously unimagined. On the other hand, virtual spaces such as Second Life bring interactivity and physicality to a whole new level and break geographical barriers that separate learners from the objects and locations constituting the focus of their learning.

However, these developments do not herald [Fukuyama](#)'s proverbial end of history in things technology. There is plenty in the cyber pipeline that will land on our screen that we will be hard-pressed or preferably willing to accommodate and harness. The subsequent iterations of Web 2.0, Web 3.0 and its sisters will take ubiquity, mobility, connectivity, AI, and human-machine interfaces to new levels ([Grzybowska et al.](#), 2019). It is incumbent upon us to explore, domesticate, and make the most of these functionalities to delineate the contours of [Education 3.0](#).

Conclusion

A fair way to adjudicate the in-person/online learning duality is to say that they needn't be conflicting. These are far from being separate islands or even separate islands connected by a causeway. Indeed, the intensity of face-to-face learning encounters will remain challenging to replicate in the online environment, but only for a while. Virtual Reality and Augmented Reality will bridge the gap in time, and the modes will slowly blend into each other.

Meantime, in-person instructors must learn to tame the "wild online beast" as it evolves to design learning experiences that serve the changing needs of their students. As [Borden](#) writes, "the education sector is focusing far too much about what existed yesterday, some about what exists today, and very little about what will exist tomorrow. This needn't be the case.

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